

November 11, 2015

The Honorable Nikki Haley, Governor State Fiscal Accountability Authority Members of the General Assembly of South Carolina

RE: FYE 2015 Report

Dear Governor and Members:

As the investment consultant for the Retirement System Investment Commission (RSIC), Aon Hewitt Investment Consulting (AHIC) is pleased to submit this summary of the investment structure and performance of the South Carolina Retirement System (SCRS) investment portfolio for the fiscal year ended (FYE) June 30, 2015.

The 2014-15 fiscal year was characterized by the continued dominance of U.S. equities as the sharp rally of the U.S. dollar held back local market gains of non-U.S. assets. Numerous factors contributed to the U.S. dollar rally. The sharp fall of both the Euro and the Yen was largely driven by the loosening of monetary policy by the European Central Bank and the Bank of Japan. In contrast, the U.S. Federal Reserve ended its quantitative easing program in October 2014, which was the first step away from its historically loose monetary policy. Other factors driving U.S. dollar gains more broadly included strong relative growth trends in the U.S., attractive U.S. sovereign yields, and country-specific situations such as falling commodity prices and heightened geopolitical risks.

Throughout the fiscal year, the Commission and its staff worked hard to further several long-term initiatives, including:

- Reviewing asset allocation to improve expected portfolio return and mitigate risk
- Refining investment strategy to lower costs, where possible

During the fiscal year ending June 30, 2015, the SCRS investment portfolio returned 1.6% on a net-of-fee basis. This return exceeded that of the Policy Index by 0.4 percentage points. Over the trailing three-and five-year periods ending June 30, 2015, the SCRS portfolio returns were 8.8% and 8.9%, respectively, which also exceeded the returns of the Policy Index. All returns are reported on a time-weighted return basis.

As of June 30, 2015, the SCRS investment portfolio totaled \$29.2 billion. This represented a decrease of \$0.6 billion from its value on June 30, 2014 due to net outflows of \$1.1 billion and investment gains of \$0.5 billion. The portfolio's asset allocation at fiscal year-end was as follows:

Global Public Equity	32.3%
GTAA <sup>1</sup> /Risk Parity	10.4
Core Fixed Income	9.6
Low Beta Hedge Funds	9.0
Private Equity	8.8
Mixed Credit	7.4
Private Debt	5.7
Emerging Market Debt	5.0
Real Estate	3.9
Cash and Short Duration (net of overlays)	3.6
Commodities	3.0
Global Fixed Income	1.3
Total	100.0%

The investment portfolio's June 30, 2015 asset allocation was within statutory limits and was consistent with the targets and ranges set forth in the Annual Investment Plan and in the Statement of Investment Objectives and Policy. AHIC will continue to work with the RSIC to monitor the structure and portfolio in an effort to optimize the portfolio's risk/return profile.

We at AHIC are honored to serve as the investment consultant to the RSIC. We look forward to working with the Commissioners and Investment Staff to further enhance the investment portfolio's ability to meet its obligations.

Sincerely,

Suzanne M. Bernard, CFA, CAIA

Sujanne M. Bernard

Partner

Aon Hewitt Investment Consulting

<sup>&</sup>lt;sup>1</sup> Global Tactical Asset Allocation

The investment performance information provided in the Investment Section of the *Comprehensive Annual Financial Report* is provided by the Systems' custodian, BNY Mellon, and is independently calculated using a time weighted rate of return.

### South Carolina Retirement System Summary of Investment Growth

(Amounts expressed in thousands)

Year Ended June 30,	Fair Value of Investments <sup>1</sup>	% Increase/Decrease for Year	Net Income (Loss) from Investments	% Increase/Decrease for Year
2015	\$ 25,707,561	0.65%	\$ 372,452	(89.41%)
2014	25,540,648	7.48%	3,515,834	59.84%
2013	23,762,666	7.50%	2,199,550	1,934.60%
2012	22,105,265	(4.85%)	108,107	(96.99%)
2011	23,232,653	17.26%	3,596,902	37.67%
2010	19,812,203	8.62%	2,612,663	154.95%
2009	18,240,380	(21.05%)	(4,754,668)	(641.53%)
2008	23,103,046	(6.77%)	(641,196)	(121.38%)
2007	24,779,857	8.97%	2,999,209	164.33%
2006	22,741,048	0.99%	1,134,639	(24.20%)

### Police Officers Retirement System Summary of Investment Growth

	Year Ended June 30,		nir Value of vestments <sup>1</sup>	% Increase/Decrease for Year	(Lo	et Income oss) from restments	% Increase/Decrease for Year
-	2015	\$		2.69%	\$		(89.14%)
	2015	Ş	4,052,870	2.09%	Ş	58,440	(09.14%)
	2014		3,946,522	9.44%		538,157	63.05%
	2013		3,606,143	9.29%		330,061	1,839.14%
	2012		3,299,647	(2.58%)		17,021	(96.72%)
	2011		3,386,895	19.93%		519,363	43.25%
	2010		2,824,156	11.33%		362,566	156.79%
	2009		2,536,671	(18.18%)		(638,389)	(647.40%)
	2008		3,100,417	(4.83%)		(85,415)	(122.80%)
	2007		3,257,632	11.66%		374,623	167.99%
	2006		2,917,468	4.31%		139,785	(20.51%)

<sup>&</sup>lt;sup>1</sup> Fair Value also includes investment categories classified as cash equivalents for financial statement purposes. Investments made with cash collateral received in the securities lending program are excluded.

# General Assembly Retirement System Summary of Investment Growth

(Amounts expressed in thousands)

			%		Income	%
Year Ended June	Fair	Value of	Increase/Decrease	(Lo	ss) from	Increase/Decrease
30,	Inve	estments <sup>1</sup>	for Year	Inve	estments	for Year
2015	\$	33,129	(1.61%)	\$	498	(89.04%)
2014		33,671	3.56%		4,543	45.75%
2013		32,515	2.11%		3,117	1,733.53%
2012		31,843	(10.27%)		170	(97.01%)
2011		35,488	8.65%		5,680	22.36%
2010		32,662	2.79%		4,642	149.34%
2009		31,777	(27.02%)		(9,409)	(728.26%)
2008		43,544	(9.27%)		(1,136)	(119.09%)
2007		47,992	5.98%		5,950	185.23%
2006		45,282	(2.20%)		2,086	(35.58%)

# Judges and Solicitors Retirement System Summary of Investment Growth

Year Ended June 30,	 r Value of estments <sup>1</sup>	% Increase/Decrease for Year	(Lo	t Income oss) from estments	% Increase/Decrease for Year
2015	\$ 149,265	2.20%	\$	2,206	(88.94%)
2014	146,095	8.25%		19,954	58.03%
2013	134,963	7.75%		12,627	1,527.19%
2012	125,255	(3.91%)		776	(96.14%)
2011	130,357	17.65%		20,086	37.14%
2010	110,798	9.44%		14,646	154.77%
2009	101,244	(19.64%)		(26,741)	(693.27%)
2008	125,987	(7.00%)		(3,371)	(121.05%)
2007	135,482	10.93%		16,017	178.00%
2006	122,128	3.24%		5,761	(29.30%)

<sup>&</sup>lt;sup>1</sup> Fair Value also includes investment categories classified as cash equivalents for financial statement purposes. Investments made with cash collateral received in the securities lending program are excluded.

### South Carolina National Guard Supplemental Retirement Plan Summary of Investment Growth

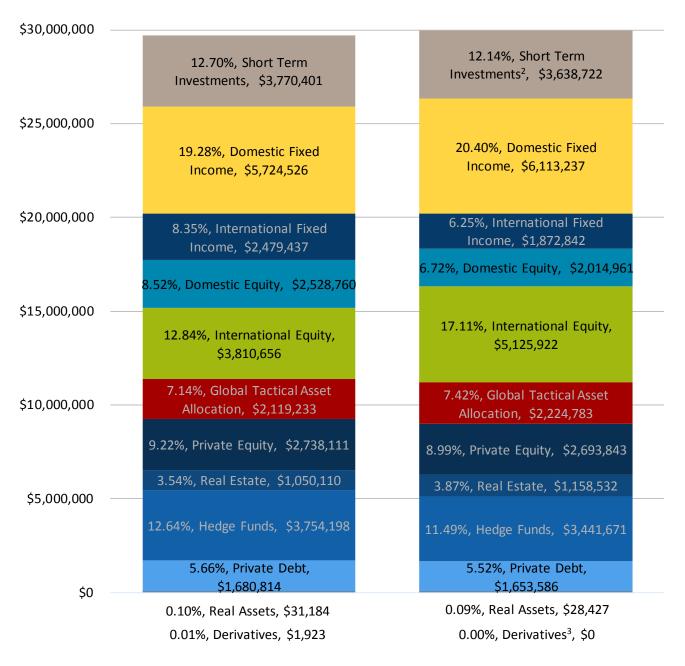
Year Ended June 30,	Fair Value of Investments <sup>1</sup>		increase/ becrease		Income ss) from estments	% Increase/Decrease for Year		
2015	\$	23,701	5.73%	\$	312	(88.87%)		
2014		22,417	12.63%		2,805	67.46%		
2013		19,904	12.69%		1,675	1,701.08%		
2012		17,662	(1.13%)		93	(96.33%)		
2011		17,864	19.04%		2,531	35.71%		
2010		15,007	16.25%		1,865	146.39%		
2009		12,909	(17.39%)		(4,020)	(1,055.17%)		
2008		15,627	(0.55%)		(348)	(117.38%)		
2007		15,714	23.83%		2,002	2,149.44%		
2006 <sup>2</sup>		12,690			89			

<sup>&</sup>lt;sup>1</sup> Fair Value also includes investment categories classified as cash equivalents for financial statement purposes. Investments made with cash collateral received in the securities lending program are excluded.

<sup>&</sup>lt;sup>2</sup> The South Carolina Public Employee Benefit Authority assumed administrative responsibilities for the South Carolina National Guard Supplemental Retirement Plan January 1, 2006; therefore, prior year data is not presented.

### South Carolina Retirement Systems Schedule of Investment Allocation<sup>1</sup>

Fair Value of Investments as of June 30, 2015 (Dollar amounts expressed in thousands)



FY 2014 FY 2015

<sup>&</sup>lt;sup>1</sup>Data provided in this chart is derived from the Statement of Fiduciary Net Position and for financial statement purposes, allocations are made based on the manager's style. Actual underlying holdings would result in a different allocation.

<sup>&</sup>lt;sup>2</sup>Short-term investments with an original maturity of three months or less were classified as cash equivalents for financial statement purposes. The short-term total includes cash of \$945,660 (in thousands). Investments made with cash collateral received in the securities lending program are excluded.

<sup>3</sup> For accounting purposes, derivatives such as futures, options and swaps are reflected in the asset class to which they pertain.

### South Carolina Retirement System Summary of Fair Value of Investments<sup>1</sup>

(Amounts expressed in thousands)

					% of Fair
		Fair	Value	9	Value at
	0	6/30/2014	0	6/30/2015	06/30/15
Short-term Investments	\$	3,236,054	\$	3,111,836	12.10%
Debt					
Domestic Fixed Income		4,926,250		5,246,660	20.41%
International Fixed Income		2,133,683		1,607,359	6.25%
Public Equity					
Domestic Equity		2,176,128		1,729,331	6.73%
International Equity		3,279,266		4,399,301	17.11%
<b>Global Tactical Asset Allocation</b>		1,823,709		1,909,410	7.43%
Alternatives		7,965,558		7,703,664	29.97%
Total Investments	\$	25,540,648	\$	25,707,561	100.00%

# Police Officers Retirement System Summary of Fair Value of Investments<sup>1</sup>

					% of Fair
		Fair '	Value		Value at
	06	/30/2014	06	5/30/2015	06/30/15
Short-term Investments	\$	504,129	\$	496,462	12.25%
Debt					
Domestic Fixed Income		760,296		825,787	20.37%
International Fixed Income		329,303		252,987	6.24%
Public Equity					
Domestic Equity		335,854		272,185	6.72%
International Equity		506,108		692,419	17.08%
<b>Global Tactical Asset Allocation</b>		281,463		300,528	7.42%
Alternatives		1,229,369		1,212,502	29.92%
Total Investments	\$	3,946,522	\$	4,052,870	100.00%

<sup>&</sup>lt;sup>1</sup>Fair Value excludes investments made with cash collateral received in the securities lending program. Assets of the Systems are pooled for investment purposes; however, percentages vary slightly between systems due to cash flow differences, which primarily impact the short-term investment category.

### General Assembly Retirement System Summary of Fair Value of Investments<sup>1</sup>

(Amounts expressed in thousands)

					% of Fair
		Fair \	/alue		Value at
	06	/30/2014	06/	30/2015	06/30/15
Short-term Investments	\$	5,716	\$	5,491	16.58%
Debt					
Domestic Fixed Income		6,174		6,417	19.37%
International Fixed Income		2,675		1,966	5.93%
Public Equity					
Domestic Equity		2,727		2,115	6.39%
International Equity		4,110		5,381	16.24%
<b>Global Tactical Asset Allocation</b>		2,286		2,336	7.05%
Alternatives		9,983		9,423	28.44%
<b>Total Investments</b>	\$	33,671	\$	33,129	100.00%

### Judges and Solicitors Retirement System Summary of Fair Value of Investments<sup>1</sup>

					% of Fair
		Fair \	<b>Value</b>		Value at
	06	/30/2014	06	/30/2015	06/30/15
Short-term Investments	\$	20,206	\$	20,315	13.61%
Debt					
Domestic Fixed Income		27,804		29,942	20.06%
International Fixed Income		12,043		9,173	6.15%
Public Equity					
Domestic Equity		12,283		9,869	6.61%
International Equity		18,508		25,106	16.82%
Global Tactical Asset Allocation		10,293		10,896	7.30%
Alternatives		44,958		43,964	29.45%
Total Investments	\$	146,095	\$	149,265	100.00%

<sup>&</sup>lt;sup>1</sup>Fair Value excludes investments made with cash collateral received in the securities lending program. Assets of the Systems are pooled for investment purposes; however, percentages vary slightly between systems due to cash flow differences, which primarily impact the short-term investment category.

### South Carolina National Guard Supplemental Retirement Plan Summary of Fair Value of Investments<sup>1</sup>

		Fair \	/alue		% of Fair Value at
	06	/30/2014	06/	/30/2015	06/30/15
Short-term Investments	\$	4,296	\$	4,618	19.48%
Debt					
Domestic Fixed Income		4,002		4,431	18.70%
International Fixed Income		1,733		1,357	5.73%
Public Equity					
Domestic Equity		1,768		1,461	6.16%
International Equity		2,664		3,715	15.67%
<b>Global Tactical Asset Allocation</b>		1,482		1,613	6.81%
Alternatives		6,472		6,506	27.45%
Total Investments	\$	22,417	\$	23,701	100.00%

<sup>&</sup>lt;sup>1</sup>Fair Value excludes investments made with cash collateral received in the securities lending program. Assets of the Systems are pooled for investment purposes; however, percentages vary slightly between systems due to cash flow differences, which primarily impact the short-term investment category.

# South Carolina Retirement Systems List of Largest Assets Held

As of June 30, 2015

	in the following index funds:		CCDC	DODG		CARC		ICDC		CCNC		Fals Value
<u>Units</u>	Description  Disclared in MCCL Moral delay		<u>SCRS</u>	PORS		GARS	٠.	JSRS	۸.	SCNG	,	Fair Value
128,309,554	Blackrock MSCI World Index	\$1	1,760,710,872	\$277,123,432	\$2			0,048,117	\$:	1,487,031	\$	2,051,522,989
22,921,176	Daily MSCI USA Index NL Fund		526,088,346	82,802,583		643,462		3,002,308		444,315		612,981,014
4,910,972	MSCI EAFE Index NL Fund (FD12)		353,100,864	55,575,577		431,880		2,015,094		298,216		411,421,631
463,573	MSCI CAD Index NL Fund (CA-12)		33,121,835	5,213,142		40,512		189,021		27,973	_	38,592,483
			Total								Ş	3,114,518,117
Top Ten Equity	Holdings											
<u>Units</u>	Description		SCRS	PORS		GARS		<u>JSRS</u>		SCNG		Fair Value
222,937	Apple Inc	\$	23,998,159	\$ 3,777,140	\$	29,352	\$	136,954	\$	20,268	\$	27,961,87
155,537	CVS Health Corp		14,000,323	2,203,552		17,124		79,898		11,824		16,312,72
127,097	UnitedHealth Group Inc		13,307,816	2,094,556		16,277		75,946		11,239		15,505,83
124,683	Gilead Sciences Inc		12,528,573	1,971,909		15,324		71,499		10,581		14,597,88
285,174	Altria Group Inc		11,970,692	1,884,102		14,641		68,315		10,110		13,947,86
238,579	Wells Fargo & Co		11,515,669	1,812,485		14,085		65,718		9,726		13,417,68
64,500	Costar Group Inc		11,141,120	1,753,533		13,627		63,581		9,409		12,981,27
281,811	Microsoft Corp		10,678,256	1,680,682		13,061		60,939		9,018		12,441,95
111,199	Home Depot Inc		10,605,811	1,669,279		12,972		60,526		8,957		12,357,54
188,000	Jack Henry & Associates Inc		10,439,358	1,643,081		12,768		59,576		8,817		12,163,60
100,000	Jack Herry & Associates me		Total			12,700		33,370		0,017	\$	151,688,22
			·otai								<u> </u>	131,000,22
Top Ten Fixed I	ncome Holdings											
Par Value	<u>Description</u>		SCRS	PORS		GARS		<b>JSRS</b>		SCNG		Fair Value
\$ 5,600,000	iShares Emerging Markets Local Currency Bond ETF	\$	210,029,898	\$ 33,057,220	\$	256,889	\$	1,198,610	\$	177,383	\$	244,720,00
1,200,000	iShares JP Morgan USD Emerging Market Bond ETF		113,206,046	17,817,831		138,463		646,050		95,610		131,904,00
122,950,000	Commit To Purchase FNMA 4.000% due 07/01/2045		111,797,722	17,596,170		136,741		638,013		94,420		130,263,06
103,400,000	US Treasury Note 2.750% due 02/15/2024		92,132,578	14,501,016		112,688		525,787		77,812		107,349,88
75,000,000	US Treasury Note 1.000% due 08/31/2016		64,831,240	10,203,978		79,296		369,982		54,754		75,539,25
84,915,000	US Treasury Bond 2.500% due 02/15/2045		64,138,415	10,094,933		78,448		366,028		54,169		74,731,99
68,000,000	US Treasury Note 1.000% due 09/15/2017		58,698,036	9,238,655		71,794		334,981		49,574		68,393,04
56,500,000	Federal Farm Credit Bank 1.125% due 12/18/2017		48,683,877	7,662,498		59,546		277,832		41,117		56,724,87
46,231,568	US Treasury - CPI Inflation 0.125% due 07/15/2024		38,695,221	6,090,354		47,328		220,828		32,681		45,086,41
44,730,000	US Treasury Note 2.125% due 06/30/2022		38,551,336	6,067,707		47,152		220,007		32,559		44,918,76

Note: A complete list of portfolio holdings is available upon request.

Total

\$ 979,631,273

# South Carolina Retirement Systems Schedule of Investment Results Combined Investment Portfolio

Schedule of Investments	FYE 2015	3 Years	5 Years
South Carolina Plan Return (Net of Fees) <sup>1</sup>	1.60%	8.81%	8.87%
South Carolina Policy Benchmark <sup>2</sup>	1.21%	7.74%	8.05%
Global Public Equity	1.91%	14.94%	13.03%
MSCI All-Country World Index Net	0.71%	13.01%	11.93%
Private Equity	9.71%	15.82%	14.39%
80% Russell 3000 / 20% MSCI EAFE + 300 Bps on a 3-month lag	12.63%	17.98%	16.02%
Commodity <sup>1,3</sup>	n/a	n/a	n/a
Bloomberg Commodity Index	-23.71%	-8.76%	-3.91%
Real Estate	19.32%	18.97%	12.81%
NCREIF Open-end Diversified Core (ODCE) Index 75 Bps	14.20%	13.41%	15.27%
HF (Low Beta)	8.62%	n/a	n/a
HFRI Fund weighted Composite Index	2.31%	6.38%	5.13%
GTAA	-1.72%	5.62%	8.62%
50% MSCI World / 50% S&P/Citi WGBI	-3.85%	5.69%	7.12%
Private Debt	4.87%	11.86%	9.78%
S&P/LSTA Leveraged Loan + 150 Bps on a 3-month lag	4.04%	6.41%	6.56%
Mixed Credit	-1.88%	5.65%	6.74%
1/3 Barclays U.S. High Yield - 2% Issuer Cap, 1/3 S&P/LSTA Leveraged			
Loan and 1/3 Barclays MBS Indices	1.25%	4.54%	5.67%
EM Debt	-7.88%	0.16%	3.20%
50% JPM EMBI USD / 50% JPM GBIEM Local	-7.72%	0.22%	3.89%
Core Fixed Income	1.62%	2.05%	3.64%
Barclays US Aggregate Bond Index	1.86%	1.83%	3.35%
Global Fixed Income	-3.41%	2.28%	4.29%
Barclays Global Aggregate Bond Index (Hedged)	2.96%	3.27%	3.71%
Short Duration	1.12%	1.40%	1.72%
Barclays 1-3 Year Government/Credit Index	0.93%	0.94%	1.17%
Cash⁴	0.02%	0.06%	0.08%
Merrill Lynch 3-Month T-Bill	0.02%	0.06%	0.08%

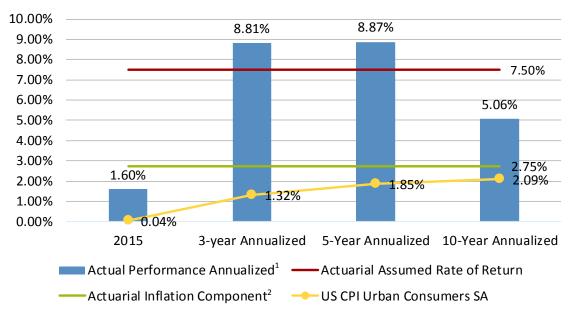
<sup>&</sup>lt;sup>1</sup> Plan returns are from BNY Mellon and are time-weighted, total return calculations, net of fees and expenses. All returns are expressed in U.S. Dollars. Periods greater than one year are annualized. Returns generated from synthetic exposure through the Overlay Program are reflected in the total Plan return but are not included in the asset class segment returns.

<sup>&</sup>lt;sup>2</sup> The South Carolina Policy Benchmark is set annually by the RSIC and has changed over time. The presented returns are a blend of these past policies.

<sup>&</sup>lt;sup>3</sup> Commodity exposure is captured in the overlay program synthetically.

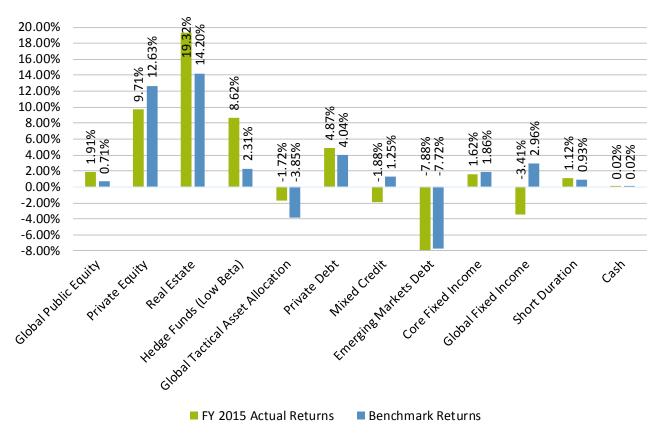
<sup>&</sup>lt;sup>4</sup> Cash returns are estimated using the Merrill Lynch 3-Month T-Bill.

### South Carolina Retirement Systems Investment Performance Summary



<sup>&</sup>lt;sup>1</sup>Plan returns are from BNY Mellon and are time-weighted, total return calculations, net of fees and expenses. All returns are expressed in U.S. Dollars. Periods greater than one year are annualized.

### Fiscal Year 2015 Investment Performance by Market Segment



<sup>&</sup>lt;sup>2</sup>The actuarial assumed rate of return is 7.50 percent starting with returns after July 1, 2011, and is composed of an assumed 2. 75 percent Inflation rate and a 4.75 percent real rate of return, net of investment and administrative expenses.

### South Carolina Retirement Systems Schedule of Investment Fees and Commissions

For the Year Ended June 30, 2015

		Un	r Value of Assets der Management t June 30, 2015 <sup>1</sup>	Reported Fees <sup>2</sup>		
Investment Managers' Fees		\$	29,925,776,151	\$	348,224,409	
Other Investment Service Fees						
Bank Fees and Investment Expenses					12,821,969	
				\$	361,046,377	
	Number of Shares			Avera	age Commissions	

	Number of Shares		Average Commissions
Brokerage Firm	Traded	Commissions <sup>3</sup>	per Share
Goldman Sachs & Co.	8,211,164	\$ 1,349,428	0.1643
Instinet Europe Limited	29,380,731	281,002	0.0096
Pershing LLC	26,269,307,281	264,612	0.0000
Merrill Lynch Pierce Fenner Smith Inc.	14,498,130	239,051	0.0165
Investment Technology Group	15,911,154	207,551	0.0130
UBS Securities LLC	12,202,521	202,100	0.0166
Morgan Stanley & Co., Inc.	24,778,505	148,307	0.0060
Credit Suisse	12,002,242	115,780	0.0097
Deutsche Bank International Equities	12,123,296	101,395	0.0084
UBS Warburg	10,798,148	86,771	0.0080
Deutsche Bank Securities Inc.	2,668,202	83,812	0.0314
RCB Capital Markets LLC	3,252,254	71,347	0.0219
Merrill Lynch Gilts LTD	7,142,039	63,933	0.0090
Knight Equity Markets LP	1,152,700	57,262	0.0497
Jefferies & Co., Inc.	2,725,540	56,150	0.0206
BNY Convergex	1,364,118	54,862	0.0402
Stifel Nicolaus	1,371,858	53,610	0.0391
All others <sup>4</sup>	87,686,729	993,955	0.0113
	26,516,576,612	\$ 4,430,928	0.0002

<sup>&</sup>lt;sup>1</sup> Assets under management include categories classified as cash and cash equivalents for financial statement purposes.

<sup>&</sup>lt;sup>2</sup> A portion of investment expenses are directly invoiced by the manager; however, a significant number of investment managers provide account valuations on a net of fee basis. The RSIC makes a good faith attempt to account for fees that are not necessarily readily separable. Conifer Financial Services, administrator for the RSIC, provides support to the RSIC for the collection, aggregation and reasonability testing so that the RSIC can provide the Retirement Division of PEBA with investment fees and expenses that would not be disclosed otherwise. These amounts include management fees, performance fees (carried interest) and other expenses such as organizational expenses in limited partnership structures.

<sup>&</sup>lt;sup>3</sup> Commissions paid to brokers are considered a part of the investment asset cost and are therefore not reported as expenses of the System.

<sup>&</sup>lt;sup>4</sup> Other brokers include 102 additional brokers each receiving less that \$50,000 in total commissions.

For the Year Ended June 30, 2015

(Amounts expressed in thousands)

### Manager Fees Deducted on a Net of Fee Basis<sup>2</sup>

				INC	t Of Fee Dasis				
		r Value of	Manager						Total
		ets Under	Fees					Inve	estment
		nagement	Directly	Management	Performance	0	ther	M	anager
Style Investment Manager	at 6	/30/2015 <sup>1</sup>	Invoiced	Fees	Fees	F	ees		Fees
Short Duration									
Apollo Partnership Short Duration	\$	190,028		\$ 502		\$	448	\$	950
Goldman Sachs Partnership Short Duration		395,143							
Penn Limited Term HY		425,071	1,549						1,549
Domestic Fixed Income									
Core Fixed Income									
Blackrock Financial Management, Inc.		1,407,385	1,332						1,332
Jamison, Eaton & Wood			316						316
Pacific Investment Management Co.		1,211,277	1,754						1,754
Russell IG Transition		165,579							
Mixed Credit									
Apollo Partnership Mixed Credit		279,673		2,489			648		3,137
GSO Partnership Mixed Credit		8,014					106		106
Guggenheim		449,014	276						276
Loomis Sayles HY		214,942	1,057						1,057
Penn HY		265,402	1,228						1,228
Pinebridge		396,190							
Global Fixed Income									
Global Fixed Income									
Loomis Sayles GFI		369,114	1,146						1,146
Mondrian GFI			674						674
WAMCO GFI			1,065						1,065
Emerging Market Debt			,						ŕ
Goldman Sachs Partnership Emerging Market Debt		255,972		1,122					1,122
Mondrian Investment Group, Inc.		214,956	1,257	•					1,257
Russell EMD Transition		552,355	509						509
Russell EMD Transition Local		51,096	22						22
Domestic Equity:		- ,							
Integrity Small V		336,094	1,886						1,886
Pyramis Small C		315,856	2,013				(81)		1,932
Russell - Large Cap Transitions		56	845				(01)		845
TimesSquare SMID G		561,263	4,249						4,249
Global Equity		301,203	1,2 13						1,213
Global Equity									
AQR		685,992	138						138
Blackrock Global Equity		2,051,523	404						404
Intech		690,479	254						254
State Street Global Equity		1,062,995	111						111
Developed International Equity		1,002,333	111						111
Johnston Fund			590						590
	,	161 ECO	390	2 740			105		
Lighthouse Partnership Developed International Equity	,	464,569	FF	2,749			195		2,944
Russell Global Equity Transition		2,907	55						55

For the Year Ended June 30, 2015

(Amounts expressed in thousands)

### Manager Fees Deducted on a Net of Fee Basis<sup>2</sup>

Style	Investment Manager	Fair Value of Assets Under Management at 6/30/2015 <sup>1</sup>	Manager Fees Directly Invoiced	Management Fees	Performance Fees	Other Fees	Total Investment Manager Fees
Eme	erging Market Equity						
	Aberdeen	236,781	1,975				1,975
	LSV Asset Management	249,155		2,584			2,584
	Schroders	246,650	1,878				1,878
	William Blair	268,151	1,698				1,698
Globa	l Tactical Asset Allocation						
	Bridgewater Associates, Inc.	1,009,390		2,970		439	3,409
	Grantham, Mayo, Van Otterloo & Co. LLC	973,268	5,493	3,370			8,863
	Entrust Partnership Global Tactical Asset Allocation	242,125		1,017	(378)	1,456	2,095
Alter	natives:						
Hed	lge Funds (Global Public Equity, Low Beta, Mixed Credit	:)					
	Apollo Partnership Hedge Funds	6,539				162	162
	Blackstone Partnership Hedge Funds	101					
	Blackstone SAF II	188,143		1,434			1,434
	Bridgewater Associates, Inc.	443,575		10,402	10,784	428	21,614
	Bridgewater Associates, Inc.	108,384		2,390	4,491	124	7,005
	Caspian SC Holdings LP	221,730		2,273	(1,566)		707
	DE Shaw - DE Shaw Composite	392,443		9,240	16,473		25,713
	GAM PA	9,365				29	29
	Goldman Sachs Partnership Hedge Funds	77,147		1,080		245	1,325
	Grosvenor Partnership Hedge Funds	376,735		3,245	84	554	3,883
	GSO Partnership Hedge Funds	93,383		1,230	(1,009)	265	486
	Lighthouse Partnership Hedge Funds	1,384,174		25,900	23,059	3,655	52,614
	Loomis Sayles Credit L/S			86	(160)		(74)
	Morgan Stanley Partnership Hedge Funds	139,953		1,066	(65)	180	1,181
	Reservoir Strategic Partners Fund L.P.	81,184		956	85	180	1,221
Priv	ate Debt						
	Angelo Gordon VI	9,392		179	(1,805)	38	(1,588)
	Apollo Partnership Private Debt	67,488		1,347	3,828	667	5,842
	Avenue Europe I (Parallel II)	3,340			315	84	399
	Avenue Europe II	55,685		1,038	1,465	285	2,788
	Avenue Spec VI	74,704		448	(8,116)	256	(7,412)
	Crescent Mezz V	29,942		287	1,404		1,691
	Crescent Mezz VI	65,943		1,166	707	463	2,336
	DE Shaw Direct Capital	24,088		299			299
	Gateway Energy	28,020		28	66	384	478
	Goldman Sachs Mezz V	12,962		780	886		1,666
	Goldman Sachs Partnership Private Debt	164,226		1,616	1,461	1,668	4,745
	Golub PEARLS	77,891		480	357	190	1,027
	GSO Partnership Private Debt	634,271		4,093	3,267	2,786	10,146
	KKR Lending Partners II	43,384			502	693	1,195

For the Year Ended June 30, 2015

(Amounts expressed in thousands)

### Manager Fees Deducted on a Net of Fee Basis<sup>2</sup>

Style	Investment Manager	Fair Value of Assets Under Management at 6/30/2015 <sup>1</sup>	Manager Fees Directly Invoiced	Management Fees	Fees	Other Fees	Total Investment Manager Fees
	Morgan Stanley Partnership Private Debt	43,531		503	508	186	1,197
	Northstar Mezz V	28,420		498		15	513
	Sankaty COP IV	42,660		1,077	51	61	1,189
	Sankaty COP V	40,464		361	(32)	94	423
	Selene I	1,723		156	1,200	489	1,845
	Selene II	72,632		1,154	520	2,058	3,732
	SJC DL II	32,460			481	68	549
	WL Ross - WLR Whole Loans	65,324		167	2,121	127	2,415
	WL Ross Partnership Private Debt	35,035					
Priv	ate Equity						
	Advent - Advent International GPE VII	36,091		615			615
	Apax Europe VII	28,248		25	5,981	30	6,036
	Apax Europe VIII	25,353		908	1,054	456	2,418
	Apollo Partnership Private Equity	212,651		2,141	(5,345)	1,368	(1,836)
	Aquiline Financial Services I	71,163		639	(1,008)	(14)	(383)
	Aquiline Financial Services II	132,776		1,587	2,938	138	4,663
	Azalea Co-Investment	23					
	BC European Cap IX	19,662		391	943	58	1,392
	Bridgepoint Europe IV	48,462		375		138	513
	Bridgepoint Europe V	(343)					
	Brookfield Capital IV	(161)					
	Carousel Capital III	6,832		18	695		713
	Carousel Capital IV	21,252		233	1,433	1	1,667
	CD&R VIII	86,704					
	Crestview II	85,254		340	1,142	59	1,541
	Crestview III	9,071		481		721	1,202
	Goldman Sachs Partnership Private Equity	63,218		863	944	242	2,049
	Industry Ventures V	51,915		2,101	4,961		7,062
	Industry Ventures VI	31,109		312			312
	Industry Ventures VII	17,372		500	304	163	967
	Lexington Capital VII	60,679		1,265	567	118	1,950
	Lexington Middle Market II	32,812		420	185	23	628
	Morgan Stanley Partnership Private Equity	341,057		3,186	2,215	611	6,012
	Neuberger Berman II	24,642		349	154	50	553
	Oaktree EOF III	34,769		585	1,754		2,339
	Pantheon Europe V	41,434		514		34	548
	Pantheon USA VII	101,960		937		1	938
	Paul Capital IX	29,692		831			831
	Reservoir Capital Partners (Cayman) L.P.	58,642		521	1,543	23	2,087
	Square 1 Venture 1	35,682		254	351	41	646
	Truebridge Capital I	52,023		340	633	63	1,036
	Truebridge Capital II	62,766		444	763	107	1,314

For the Year Ended June 30, 2015

(Amounts expressed in thousands)

### Manager Fees Deducted on a Net of Fee Basis<sup>2</sup>

		Fair Value of Assets Under	Manager				Total
		Management	Fees Directly	Management	Performance	Other	Investment Manager
Style	Investment Manager	at 6/30/2015 <sup>1</sup>	Invoiced	Fees	Fees	Fees	Fees
	Warburg Pincus X	76,496		2,054	216	213	2,483
	Warburg Pincus XI	38,625		1,113	1,820	274	3,207
	Welsh Carson Anderson & Stowe XI	43,579		299	1,881	77	2,257
	WL Ross Partnership Private Equity	195,744		119	4,541	78	4,738
	Various Private Equity Managers <sup>3</sup>	436,707		979	834	63	1,876
Real E		,					,
	American Timberlands Fund	27,936		450	(598)		(148)
	Apollo Partnership Real Estate	91,465		1,317	2,449	971	4,737
	Blackstone Real Estate VII	139,223		4,232	6,147		10,379
	Brookfield REF III	24,367		613			613
	Brookfield REF IV	9,097		45		42	87
	Brookfield SREP LP	74,313		2,561	1,934		4,495
	Brookfield SREP II LP	(49)					
	Carlyle VI	74,156		681	5,060		5,741
	Goldman Sachs Partnership Real Estate	10,748		349	677	1,342	2,368
	Greystar VII	192,752		832	8,771	(3)	9,600
	Lone Star II	13,611		652	2,261	73	2,986
	Morgan Stanley Partnership Real Estate	97,645		1,061	1,968	585	3,614
	Oaktree ROF V	64,558		921	2,981		3,902
	Oaktree ROF VI	83,853		1,123	3,508		4,631
	Och-Ziff II	40,121	446		2,293	266	3,005
	Pembrook Capital Management - PCI Investors Fund II	23,569		427	581	2,529	3,537
	TA Realty X	81,073		923	1,342		2,265
	Torchlight III	13,295		268	1,662	197	2,127
	Torchlight IV	64,882		695	1,713	608	3,016
	U. S. REIF	12,068					
	WL Ross Partnership Real Estate	48,276		928	(5)	101	1,024
Strate	gic Partnerships <sup>4</sup>						
	Apollo	89,616				360	360
	Entrust	50,228					
	Goldman Sachs	173,409		538		1,449	1,987
	Grosvenor	71,137				98	98
	GSO	37,844					
	Lighthouse	252,586		4,708		1,390	6,098
	Morgan Stanley	49,958		48		633	681
	WL Ross	114,989		1,014		513	1,527
Beta (	Overlay						
	Russell Investment Group	641,339	935				935

For the Year Ended June 30, 2015

(Amounts expressed in thousands)

### Manager Fees Deducted on a Net of Fee Basis<sup>2</sup> **Fair Value of Total** Manager **Assets Under** Investment **Fees** Management Directly Management Performance Other Manager at 6/30/2015<sup>1</sup> Style **Investment Manager Invoiced Fees Fees** Fees **Internally Managed Assets** Core Fixed Income 496,157 **Short Duration** 1,280,224 **SCRS Liquidity** 348,022 **Cash Accounts** 715,544 SCRS Emerging Markets Debt ETF 376,624 SCRS Distribution In Kind 2,273 Total Fair Value of Assets and Manager Fees \$ 29,925,776 \$ 35,155 141,907 135,227 \$35,935 \$ 348,224 Adjustments, Cash, Receivables and Payables (736, 238)Net Asset Value as reported by the Custodial Bank \$ 29,189,538

<sup>&</sup>lt;sup>1</sup>The "Fair Value" of assets under management includes categories classified as cash equivalents for financial statement purposes and excludes cash, receivables and payables; therefore, these adjustments are necessary to reconcile to "Net Asset Values" reported by the Custodial Bank and the Retirement System Investment Commission.

<sup>&</sup>lt;sup>2</sup>Investment manager fees, whether directly invoiced (\$35,155,508) or deducted from the fund on a net basis (\$313,068,901) are classified and reported as Investment Expense. The RSIC makes a good faith attempt to account for fees that are not necessarily readily separable. Conifer Financial Services, administrator for the RSIC, provides support to the RSIC for the collection, aggregation and reasonability testing so that the RSIC can provide the Retirement Division of PEBA with investment fees and expenses that would not be disclosed otherwise. These amounts include management fees, performance fees (carried interest) and other expenses such as organizational expenses in limited partnership structures.

<sup>&</sup>lt;sup>3</sup>Represents the aggregation of five managers, each with total investment manager fees of less than \$250,000, and one manager that has a non-disclosure agreement.

<sup>&</sup>lt;sup>4</sup>Represents management and other fees at the Strategic Partnership level, and not fees at the underlying investment level which are included in each applicable asset class. Fair Value represents cash balances at the Strategic Partnership level.